|                 | -                | Ir   | ıde       |          | of           | F C          | la           | in       | าร             |           |          |      |               |          | 7            | ٩pp     | lica     | atio              | n l                                    | No.             |          |     |                   |            |                 | Ap       | plic     | an           | t(s       | )         |         |          |
|-----------------|------------------|--|-----------|----------|--------------|--------------|--------------|----------|----------------|-----------|----------|------|---------------|----------|--------------|---------|----------|-------------------|--|-----------------|----------|-----|-------------------|------------|-----------------|----------|----------|--------------|-----------|-----------|---------|----------|
| Index of Claims |                  |  |           |          |              |              |              |          |                |           |          | 1    | 10/766,941    |          |              |         |          |                   |  |                 |          |     | JANZ ET AL.       |            |                 |          |          |              |           |           |         |          |
|                 |                  |  | Ш         | Ш        |              | Ш            | Ш            |          |                |           |          |      |               |          |              | Еха     |          |                   |  |                 |          |     |                   |            |                 | Art      | t Ur     | nit          |           |           |         |          |
|                 |                  |  |           |          |              |              |              |          |                |           |          |      |               |          | 1            | 3re     | nda      | a A               | La                                     | amb             | )        |     |                   |            |                 | 17:      | 34       |              |           |           |         |          |
|                 |                  |  | ,         |          |              |              |              |          |                |           |          |      |               |          |              |         |          |                   |  |                 |          |     |                   |            |                 |          |          |              |           |           | _       |          |
|                 |                  | <b>√</b>   | Re        | ejec     | te           | d            |              |          | -              | Τ)        | hro      |      | n nu<br>celle |          | ral          | )       |          | N                 | Ν                                      | on-             | -Ele     | cte | ed                |            | Α               |          | Ар       | pe           | al        |           |         |          |
|                 |                  | -  |           |          |              | $\dashv$     |              | Ì        | $\dashv$       |           |          |      |               |          |              |         |          |                   |  |                 |          |     |                   |            |                 |          |          |              |           |           |         |          |
|                 |                  | =  | A         | lov      | vec          | 1            |              |          | +              |           | F        | lesi | rict          | ed<br>   |              |         |          |                   | lr                                     | nter            | fere     | no  | СӨ                |            | 0               |          | Obje     | ect          | ed        |           |         |          |
| Clai            | m                |  | Date      |          |              |              |              |          |                | $\neg$    | Claim    |      |               |          |              | Date    |          |                   | —————————————————————————————————————— |                 | Claim    |     |                   | Date       |                 |          |          |              |           |           |         |          |
|                 |                  | 2  | $\neg$    | 1        | Ť            |              | Т            |          | -Т             | -         |          |      |               | Т        | $\top$       | T       |          | Ĭ                 |  |                 | $\dashv$ | F   |                   |            |                 | Т        | Т        | Ť            | Ť         | T         |         |          |
| rina<br>B       | Original         | 2  |           |          | Ì            |              |              |          |                |           | Final    |      | Original      |          |              |         |          |                   |  |                 |          |     | Final             | Original   |                 |          |          |              |           |           |         |          |
| -               | ō                | 7  |           |          |              |              |              |          |                |           | ۳ ا      | 6    | 5             |          |              |         |          |                   |  |                 |          |     | ۱ ۳               | ō          |                 |          |          |              |           |           |         |          |
| +               | 1                | $\exists$  | $\dashv$  | $\dashv$ | +            | $\dashv$     | $\dashv$     | 1        | $\dashv$       | $\dashv$  |          | +    | 1             | +        | +            | +       | $\vdash$ | $\vdash$          |  |                 | $\dashv$ | -   |                   | 101        |                 | $\dashv$ | _        | $^{\dagger}$ | 1         | $\pm$     | $\perp$ |          |
|                 | 2                | ٧  |           |          |              |              | 1.           |          |                | $\exists$ |          | 5    | 2             |          |              |         |          |                   |  |                 |          |     |                   | 102        |                 |          |          | I            | I         | $\bot$    |         |          |
| _               | 3                | $\parallel$                                      | _         | _        | $\downarrow$ | $\perp$      | $\downarrow$ | _        |                | 4         |          |      | 3             | - -      | +            | -       | <u> </u> |                   | _                                      |                 | $\dashv$ | -   |                   | 103        | $\vdash \vdash$ | +        | +        | +            | +         | +         | +-      | _        |
| +               | 5                |  | $\dashv$  | +        | +            | +            | +            | $\dashv$ |                | -         | -        | 15   | 5             | +        | +            | +-      | +-       |                   | -                                      | $\vdash$        | $\dashv$ | -   |                   | 104<br>105 |                 | +        | +        | +            | +         | +         | +       |          |
| +               | 6                | $\dashv$   |           |          | $\dashv$     | $\dashv$     | +            | $\dashv$ | $\neg \dagger$ | $\dashv$  |          |      | 6             | +        | +            | +       | $\vdash$ | -                 |  | $\vdash$        | $\dashv$ | H   |                   | 106        |                 | +        | +        | $\dagger$    | $\dagger$ | $\dagger$ |         |          |
| $\exists$       | 7                |  |           |          |              |              |              |          |                |           |          | - 5  | 7             |          |              |         |          |                   |  |                 |          |     |                   | 107        |                 |          |          |              |           |           |         |          |
| $\Box$          | 8                |  |           |          | $\Box$       |              |              |          | $\bot$         |           |          |      | 8             |          | 1            | 1_      | _        | Ш                 |  |                 |          |     |                   | 108        |                 | $\perp$  | $\bot$   | ╄            | _         | 4_        | -       |          |
| _               | 9                |  |           |          | 4            | _            | $\dashv$     |          |                | 4         |          |      | i9<br>i0      |          | +            |         | $\vdash$ | $\vdash$          | $\dashv$                               | $\vdash$        | 4        | -   |                   | 109<br>110 | H               | -        | +        | ╄            | +         | +         | +       |          |
| _               | 10<br>11         | +  |           | $\dashv$ | $\dashv$     | $\dashv$     | -+           |          | +              | ╣         |          |      | 1             |          | +            | ╁╾      | ╁        | H                 | $\dashv$                               | H               | -        | }   |                   | 111        |                 | +        | +        | +            | +-        | +         | +-      |          |
|                 | 12               |  | ,         | 寸        | -            |              | _            | 7        | 十              | ┪         |          |      | 2             | +-       | $\top$       | $\top$  |          | Н                 |  | $\Box$          |          | t   |                   | 112        |                 |          | $\top$   | T            | †         |           |         |          |
| $\Box$          | 13               | $\checkmark$                                     |           |          |              |              |              |          | $\Box$         |           |          | E    | 3             |          |              |         |          |                   |  |                 |          |     |                   | 113        |                 |          |          |              |           |           |         |          |
|                 | 14               | $\mathcal{Q}$                                    |           | _        | _            | $\downarrow$ | _            | _        | 4              | _         |          |      | 4             | -        | _            | $\perp$ | ╀        | $\sqcup$          | $\dashv$                               | $\perp$         | _        | F   |                   | 114        |                 | _        | _        | -            | <u> </u>  | _         | -       |          |
|                 | 15<br>16         | O  | ,         | +        | _            | -+           |              |          | +              | $\dashv$  |          |      | 5<br>6        | +        | +-           | +       | ╁        | $\vdash$          | $\dashv$                               | $\dashv$        | $\dashv$ | H   |                   | 115<br>116 |                 | +        | +        | ╁            | ╁         | +         | +       |          |
|                 | 17               | ¥  |           | $\dashv$ | $\dashv$     | $\dashv$     | _            | -        |                | $\dashv$  |          |      | 7             | $\dashv$ | +            | +       | ╁┈       | $\vdash$          | ᅥ                                      | $\vdash$        | $\dashv$ | F   |                   | 117        |                 | +        |          | t            | +         |           | +       |          |
|                 | 18               |  |           |          |              |              | $\exists$    |          |                |           |          | 6    | 8             |          |              |         |          |                   |  |                 |          |     |                   | 118        |                 |          |          |              |           |           |         |          |
|                 | 19               | Ц  | _         | _        | _            | _            | $\perp$      | $\dashv$ | $\perp$        | _         | <u> </u> |      | 9             |          | _            |         | <u> </u> | Ш                 |  |                 | _        | -   |                   | 119        |                 | _        | $\perp$  | -            |           | -         | ╁       | _        |
|                 | 20               | $\dashv$   | $\dashv$  | -+       | +            | $\dashv$     | -            | -        | $\dashv$       | ┥.        | $\vdash$ |      | '0<br>'1      | -        | +            | -       | -        | $\vdash$          | -                                      | Н               | _        | +   |                   | 120<br>121 | $\vdash$        | +        | +        | +            | ╁         | +-        | +       | H        |
|                 | 21<br>22         | +  | $\vdash$  | +        | +            | +            | $\dashv$     | $\dashv$ | +              | $\dashv$  | $\vdash$ |      | 2             | +        | +            | +       | $\vdash$ | +-                | $\dashv$                               | $\vdash$        | $\dashv$ | H   |                   | 122        | $\vdash$        | +        | +        | $\dagger$    | +         | +         | +       | $\vdash$ |
|                 | 23               |  |           |          |              |              |              | _        |                |           |          | 7    | '3            | $\perp$  | 1            |         | $L^{-}$  |                   |  |                 |          | 十   |                   | 123        |                 | 上        | ╧        | İ            | I         | I         |         |          |
|                 | 24               | $\mathbf{I}$                                     |           | $\Box$   | 7            | $\Box$       |              |          | $\Box$         | $\Box$    |          | 7    | '4            | $\perp$  | I            |         |          | П                 |  |                 |          |     |                   | 124        | П               | $\perp$  |          | T            | L         | 1         |         |          |
| +               | 25               | 4  |           | $\dashv$ |              | _            | +            | _        | +              | _         | -        | 1    | '5<br>'c      | _        | +            | $\perp$ | -        | $\vdash$          |  | $\vdash \vdash$ | $\dashv$ | -   | $\dashv$          | 125        | $\vdash \vdash$ | +        | +        | +            | +         | +-        | +-      | -        |
| $\dashv$        | 26<br>27         | +  | $\vdash$  | $\dashv$ | +            | $\dashv$     | +            | -        | +              | $\dashv$  | -        |      | '6<br>'7      | +        | +            | +       | $\vdash$ | $\vdash$          |  | $\vdash$        | -        | +   | -+                | 126<br>127 | $\vdash$        | +        |          | +-           | +         | +-        | ╁       |          |
|                 | 28               | +  |           | -+       | +            | $\dashv$     | $\dashv$     |          | +              | $\dashv$  | -        |      | 8             | +        | +            | +       | T        | $\vdash \vdash$   |  | $\vdash$        | $\dashv$ | +   |                   | 128        | H               | $\dashv$ | $\dashv$ | $\dagger$    | $\dagger$ | +         | +       | $\vdash$ |
|                 | 29               |  |           |          |              |              |              |          |                |           |          | 7    | 9             | 丄        | ightharpoons |         |          |                   |  |                 |          |     | -                 | 129        | П               |          |          | Ţ            | $\perp$   |           |         |          |
|                 | 30               | V  |           | Ţ        | $\Box$       | $\Box$       | $\bot$       | $\Box$   | $\bot$         | 4         |          |      | 30            | $\perp$  | 丰            | $\bot$  | $\vdash$ | $\Box$            |  |                 | _        |     |                   | 130        | ]               | $\perp$  | 1        | L            | $\perp$   |           | 1       | L        |
|                 | 31               | Ľ  | $\square$ | -        | $\dashv$     | _            | 4            | _        | +              | $\dashv$  | -        |      | 31            | +        | +            | -       | $\vdash$ | +                 | -                                      |                 | _        | }   | $\dashv$          | 131<br>132 | -               |          | +        | -            | +         | +         | +       | -        |
|                 | 32<br>33         | $\vdash$   | $\vdash$  | $\dashv$ | +            | $\dashv$     | $\dashv$     | $\dashv$ |                | -         |          |      | 33            | +        | +            | +       | ╁        | $\vdash \vdash$   | $\vdash$                               | $\vdash \vdash$ | $\dashv$ | F   |                   | 132        | $\vdash$        | $\dashv$ |          | +-           | +-        | +         | +       | $\vdash$ |
|                 | 34               | <u> </u>   | $\forall$ | $\dashv$ | +            | $\dashv$     | +            | $\dashv$ | $\dashv$       | $\dashv$  |          |      | 14            | +        | +            | +       | 1        | $\vdash$          |  | H               | =        | -   |                   | 134        | $\Box$          | $\dashv$ | $\top$   | $\dagger$    | $\dagger$ | +         | +       | -        |
|                 | 35               |  |           |          |              |              |              |          |                | $\exists$ |          |      | 35            |          |              |         |          |                   |  |                 |          |     |                   | 135        |                 |          |          |              |           |           |         |          |
| $\perp$         | 36               |  |           | $\dashv$ | $\bot$       | Ţ            | Д            | $\Box$   | $\Box$         | $\Box$    |          | [    | 6             | $\perp$  | $\bot$       | 1       | $\perp$  | $\Box$            |  |                 |          | F   |                   | 136        | $\Box$          | _[_      | _        | F            | $\perp$   | $\perp$   | $\perp$ | L        |
|                 | 37<br>38         |  | $\vdash$  | -+       | -            | -            | 4            | $\dashv$ | $\perp$        | $\dashv$  | $\vdash$ |      | 37<br>38      | +        | +            | +-      | ╁        | $\vdash$          |  | $\vdash$        | $\dashv$ | F   |                   | 137<br>138 | $\vdash$        |          | -        | +            | +         | +         | +       |          |
|                 | <i>3</i> 8<br>39 | <del>                                     </del> | $\vdash$  | $\dashv$ | $\dashv$     | $\dashv$     | +            | $\dashv$ | +              | $\dashv$  | $\vdash$ |      | 9             | +        | +            | +-      | $\vdash$ | $\vdash$          | -                                      | $\vdash$        | $\dashv$ | H   |                   | 138        | $\vdash$        |          | +        | ╁            | +-        | +         | +       | $\vdash$ |
|                 | 40               |  | $\exists$ | 十        | $\forall$    | $\dashv$     | 1            | $\dashv$ | +              | $\dashv$  |          |      | 0             | +        | +            | +       | T        | $\dagger \exists$ |  | $\vdash \vdash$ | $\dashv$ | -   | - 1               | 140        | $\vdash$        | +        |          | $\perp$      | 1         | T         | $\pm$   |          |
|                 | 41               |  |           |          |              |              |              |          |                |           |          | 9    | )1            | $\perp$  | $\perp$      |         |          | П                 |  |                 |          |     |                   | 141        |                 |          |          | Ţ            |           | Ţ         | $\Box$  |          |
| _               | 42               | <u> </u>   |           | _        | $\perp$      | 4            | _            | _        | $\perp$        | 4         | $\vdash$ | 1    | 2             | $\perp$  | $\perp$      | $\perp$ | 1        | Н                 |  | $\sqcup$        | _        | L   | $\longrightarrow$ | 142        |                 | $\perp$  | _        | $\perp$      | $\perp$   | 4-        | +       | _        |
| $\perp$         | 43               | <u> </u>   | $\sqcup$  | _        | _            | _            | $\dashv$     | _        | $\perp$        |           | <u></u>  | 15   | 3             | $\perp$  | $\perp$      | 4-      | <b> </b> | $\sqcup$          |  | Щ               | _        | L   |                   | 143        | Щ               |          | $\bot$   | 1            | +         | -         | $\bot$  | <u> </u> |

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